

# Antenna Pattern Visualization



Project Title	Antenna Pattern Visualization
Project Summary	Given information on an antenna, create an XML file and Schema that can be read by a Python script or MATLAB code to render a 3D visualization of the pattern.
Country	United States

## Project Description

An XML file format has been created to standardize information regarding antenna patterns and other electrical and physical attributes of the antenna. I would like to see a schema developed to validate an XML file to ensure it is consistent with the antenna pattern standard. Once the antenna pattern is in a standard and valid format, I would like to be able to visualize the pattern in 3D using either a Python script or MATLAB code (bonus points for both).

## Required Skills or Interests

Skill(s)

Coding

Data visualization

## Additional Information

An example antenna pattern xml file will be provided as a starting point. The genesis of the pattern standard can be found here: [http://nsma.org/wp-content/uploads/2016/05/wg16\\_99\\_050.pdf](http://nsma.org/wp-content/uploads/2016/05/wg16_99_050.pdf). I have added additional information I would like to capture in the new standard.

# Language Requirements

*None*